

METHOD AND SYSTEM FOR IMPROVING CONTRAST USING MULTI-RESOLUTION CONTRAST BASED DYNAMIC RANGE MANAGEMENT

ABSTRACT OF THE DISCLOSURE

A method, system and computer readable medium for implementing and performing a multi-resolution contrast-based dynamic range management algorithm and allowing for the efficient compression of an intensity dynamic range of an input image to a reduced intensity dynamic range of an image display signal. Specifically, the method, system and computer readable medium of the invention comprise decomposing the input image into a plurality of image components, modifying the intensity characteristics of the plurality of image components and reconstructing the plurality of image components into an output image for display on an image display device. In another aspect of the method, system and computer readable medium of the invention, the decomposition of the input image and reconstruction into an output image are performed using a Laplacian pyramid. In a further aspect of the method, system and computer readable medium of the invention, the intensity characteristics of each of the image components in the plurality are modified separately.

Figures